

Amendments to the Claims

Claims 1-19 (Canceled)

Claim 20 (New) An optical transmission apparatus for transmitting an optical signal via an optical fiber to a radio base station which photoelectrically converts the optical signal into a radio signal having a predetermined frequency and transmits the radio signal to a subscriber terminal, the optical transmission apparatus comprising:

an electrical-optical converter operable to convert an intermediate frequency signal into an optical signal by intensity-modulation;

a local oscillation signal source operable to output a local oscillation signal; and

an external modulator operable to intensity-modulate the optical signal using the local oscillation signal to produce an intensity-modulated optical signal, wherein

an intensity-modulation component of the intensity modulated optical signal has a frequency component of the radio signal.

Claim 21 (New) The optical transmission apparatus according to claim 20, wherein

said electrical-optical converter is operable to convert a plurality of intermediate frequency signals into the optical signal by intensity-modulation.

Claim 22 (New) The optical transmission apparatus according to claim 20, wherein

said external modulator is a Mach-Zehnder type external modulator, and a bias point in said Mach-Zehnder type external modulator is set to a point at which light output power is a minimum or a maximum so that the optical signal is intensity-modulated by a component which is twice a frequency of the local oscillation signal.

Claim 23 (New) The optical transmission apparatus according to claim 20, wherein

said electrical-optical converter is a semiconductor laser for converting the intermediate frequency signal into an electrical-optical converted optical signal through direct modulation.